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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,787

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EXAMINER

EOFF, ANCA

ART UNIT

PAPER NUMBER

1795

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DELIVERY MODE

08/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,787	Applicant(s) KANEDA ET AL.	
	Examiner ANCA EOFF	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,6,12-14 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,6,12-14 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 3, 6, 12-14 and 16-18 are pending in the application. Claims 1-2, 4-5, 7-11 and 15 have been canceled.
2. The foreign priority document JP 2003-418112, filed on December 16, 2003 was received and acknowledged. However, in order to benefit of the earlier filing date, a certified English translation is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 12-14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyanagi et al. (WO 03/072634, wherein the citations are from the English equivalent document US Pg-Pub 2005/0153530) in view of Wyatt et al. (US Pg-Pub 2003/0118946).

With regard to claims 3, 13, 16 and 17, Koyanagi et al. disclose that the developer for a photosensitive composition may be a solvent, such as cyclohexanone, tetramethylbenzene, propylene glycol monomethyl ether acetate (par.0123). The Koyanagi reference fails to disclose that such solvents may be used in combination/mixture as developer.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use more than one solvent for the developer of Koyanagi et al., for the same purpose.

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (MPEP 2144.06.I—Combining Equivalents Known For the Same Purpose).

The tetramethylbenzene of Koyanagi et al. is equivalent to the "C₁₀-based aromatic hydrocarbon" of claims 3 and 16 and to the "aromatic hydrocarbon having 9 carbon atoms or more within the molecule" of claims 13 and 17 of the instant application.

The cyclohexanone of Koyanagi et al. is equivalent to a solvent other than aprotic polar solvents of the instant application and it is a ketone.

The propylene glycol monomethyl ether acetate of Koyanagi et al. is equivalent to a solvent other than aprotic polar solvents of the instant application and it is a glycol ether carboxylate.

Koyanagi et al. fail to disclose the amount of tetramethylbenzene in the developer.

Wyatt et al. disclose printing plate developing solvent compositions, wherein such composition comprises mixtures of solvents including aromatic hydrocarbons (see table 1, par.0062). Wyatt et al. disclose mixtures of solvents comprising 20% by mass of aromatic hydrocarbons (see Example 4 in table 1, par.0062).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use tetramethylbenzene in an amount of 20% by mass in a solvent mixture used as developer for the photosensitive resin of Koyanagi et al., as taught by Wyatt et al., with a reasonable expectation of success.

Koyanagi et al. shows that the developer dissolves/removes the unexposed areas of the photosensitive resin (par.0171). Therefore, the developer of Koyanagi modified by Wyatt is a photosensitive composition remover.

The fact that the remover is used "for removal of an uncured photosensitive composition" and "for removal of a photosensitive composition containing a pigment" is merely an intended use and adds no patentable weight to the claim.

Therefore, the developer of Koyanagi modified by Wyatt is equivalent to the photosensitive composition remover of the instant application.

Claim 12 contains only limitations regarding the intended use of the remover composition of claim 3 and such limitations do not add any patentable weight to the claim. Therefore, the developer of Koyanagi modified by Wyatt meets the limitations of the claim.

With regard to claim 14, tetramethylbenzene, cyclohexanone and propylene glycol monomethyl ether acetate are solvents.

5. Claims 3, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamayachi et al. (US Patent 4,943,516) in view of Wyatt et al. (US Pg-Pub 2003/0118946).

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With regard to claims 3, 16 and 17, Kamayachi et al. teach a developing solution for a photosensitive resin composition, wherein the developing solution may comprise solvents such as cyclohexanone, propylene glycol monomethyl ether and tetramethylbenzene (column 15, lines 43-51).

Kamayachi et al. fail to disclose that such solvents may be used in combination/mixture as developer.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use more than one solvent for the developer of Kamayachi et al., for the same purpose.

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (MPEP 2144.06.I—Combining Equivalents Known For the Same Purpose).

The tetramethylbenzene of Kamayachi et al. is equivalent to the C₁₀-based aromatic hydrocarbon of the instant application.

The cyclohexanone of Kamayachi et al. is equivalent to a solvent other than aprotic polar solvents of the instant application and it is a ketone.

The propylene glycol monomethyl ether of Kamayachi et al. is equivalent to a solvent other than aprotic polar solvents of the instant application and it is a glycol ether.

Kamayachi et al. fail to disclose the amount of tetramethylbenzene in the developer.

Wyatt et al. disclose printing plate developing solvent compositions, wherein such composition comprises mixtures of solvents including aromatic hydrocarbons (see

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table 1, par.0062). Wyatt et al. disclose mixtures of solvents comprising 20% by mass of aromatic hydrocarbons (see Example 4 in table 1, par.0062).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use tetramethylbenzene in an amount of 20% by mass in a solvent mixture used as developer for the photosensitive resin of Kamayachi et al., as taught by Wyatt et al., with a reasonable expectation of success.

Kamayachi et al. further show that the unexposed portion of the photosensitive resin composition coating is developed with the developer solution (column 16, lines 15-17). Therefore, the developer of Kamayachi modified by Wyatt is a "photosensitive composition remover".

The fact that the remover is used "for removal of an uncured photosensitive composition" and "for removal of a photosensitive composition containing a pigment" is merely an intended use and adds no patentable weight to the claim.

Therefore, the developer of Kamayachi modified by Wyatt is equivalent to the photosensitive composition remover of the instant application.

6. Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamayachi et al. (US Patent 4,943,516) in view of Wyatt et al. (US Pg-Pub 2003/0118946) as applied to claim 3 and in further view of Dhillon (US Patent 4,822,723).

With regard to claims 6 and 18, Kamayachi modified by Wyatt teach a developer which may comprise a mixture of tetramethylbenzene, propylene glycol monomethyl

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ether and cyclohexanone (see paragraph 5 above). However, Kamayachi and Wyatt fail to disclose the amount of propylene glycol monomethyl ether in the developer.

Dhillon teaches a developer composition for printing plates (abstract), wherein said developer composition may comprise between 25-75% by weight of propylene glycol monomethyl ether (column 3, lines 19-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use propylene glycol monomethyl ether in an amount between 25% and 75% by weight in the developer composition of Kamayachi modified by Wyatt, with a reasonable expectation of success.

Response to Arguments

7. With regard to the applicant's arguments, see pages 5-10 and 12 of the Remarks filed on May 12, 2009, the examiner would like to note that:

- The rejection of claim 12 under 35 USC 112-2nd paragraph is withdrawn following the applicant's amendment to the claim.

- The rejection of claims 3, 12 and 14-15 under 35 USC 102(b) over Takagi et al. (US Patent 5,521,054) is withdrawn following the applicant's amendment to claim 3.

- The rejection of claims 3, 12, 14-15 under 36 USC 102(b) over Kasari et al. (US patent 5,330,796) and as evidenced by Takagi et al. (US Patent 5,521,054) is withdrawn following the amendment to claim 3.

- The rejection of claim 3 under 35 USC 102(b) over Phillips et al. (US Patent 5,198,482) and as evidenced by Takagi et al. (US Patent 5,521,054) is withdrawn following the amendment to claim 3.

- The rejection of claim 13 under 35 USC 102(b) over Van den Berr et al. (US Pg-Pub 2002/0123600) and as evidenced by Takagi et al. (US Patent 5,521,054) is withdrawn following the amendment to claim 13.

- The rejection of claim 6 under 35 USC 103(a) over Phillips et al. (US Patent 5,198,482) is withdrawn following the amendment to claim 3.

8. Applicant's arguments (see page 11 of the Remarks filed on May 12, 2009) with regard to the rejection of claims 3 and 16 are rejected under 35 U.S.C. 103(a) over Koyanagi et al. (WO 03/072634, wherein the citations are from the English equivalent document US Pg-Pub 2005/0153530) in view of Wyatt et al. (US Pg-Pub 2003/0118946) have been fully considered but they are not persuasive.

The applicant argues that Koyanagi et al. teach tetramethylbenzene as one of the examples of developer while Wyatt et al. disclose a developing solution comprising diisopropylbenzene.

The applicant argues that Koyanagi and Wyatt do not teach that tetramethylbenzene and diisopropylbenzene have the same developing properties and that one of ordinary skill in the art would not have been motivated to combine the teachings of Koyanagi and Wyatt.

The applicant further argues that the present invention relates to a remover, not a developer and that the composition of the remover of the instant application is not obvious over the combined prior art related to developers.

The examiner would like to show that Koyanagi et al. teach a developer, which may comprise aromatic hydrocarbons, such as tetramethylbenzene (par.0123).

Wyatt et al. teach a developer comprising diisopropylbenzene (abstract), which is an aromatic hydrocarbon.

Therefore, one of ordinary skill in the art would have been motivated to apply the teachings of Wyatt et al. regarding the amount of the aromatic hydrocarbon in a developer for the aromatic hydrocarbon-containing developer of Koyanagi et al.

Koyanagi et al. specifically teach that the developer dissolves/removes the unexposed area of the photosensitive resin composition (par.0171). Therefore, the developer of Koyanagi modified by Wyatt is a "remover".

9. Applicant's arguments with respect to the amended claims 3, 6, 12-14, 16 and the new claims 17-18, have been considered but are moot in view of the new grounds of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANCA EOFF whose telephone number is (571)272-9810. The examiner can normally be reached on Monday-Friday, 6:30 AM-4:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. E./

Examiner, Art Unit 1795

/Cynthia H Kelly/

Supervisory Patent Examiner, Art Unit 1795